



TAXONOMIC STUDIES OF *Homalomena philippinensis* and *Homalomena philippinensis* var. *rubescens* (ARACEAE) BASED ON MORPHOLOGICAL AND PALYNOLOGICAL STUDIES

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ISAAC PAUL B. AÑOC
CHARIZZA C. MATURGO

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ABSTRACT

The two taxa namely *Homalomena philippinensis* and *H. philippinensis* var. *rubescens* were investigated using morphological and palynological studies. This study was carried out to differentiate the two taxa and solve its taxonomic circumscription. In morphological study, the qualitative and quantitative characters of both vegetative and reproductive parts were observed, measured and examined. For palynological studies, light microscopy (LM) and scanning electron microscopy (SEM) were used to observe the pollen structures. Results revealed that morphologically, two taxa are different when it comes to leaf number, leaf blade, length and width, petiole and blade color, leaf blade shape, base, variation, petiole length, inflorescence number, spathe shape and size, spathe color, stigma sessile color, fruiting spathe color and size. Pollen grains of both taxa are bilateral, inaperturate, and smooth. They only differ in size where in *H. philippinensis* has larger pollen (2.61-5.68 μm) while its variety has smaller size (2.64-2.90). Based on the results, morphological and palynological studies can be used to delimit the two taxa. Other taxonomic evidences, however, such as DNA, chromosome, and anatomical studies is strongly recommended to solve the taxonomic problem of these two taxa.



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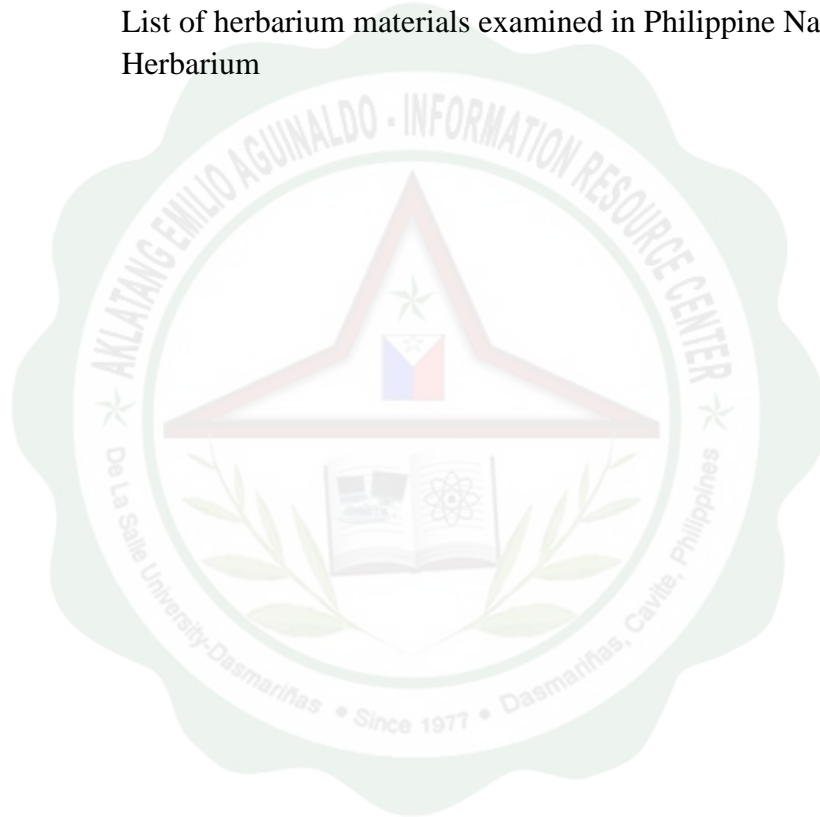
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